

Through the Looking Glass

A New Way to Learn Program Management

Owen C. Gadeken



Teaching methods at the Defense Acquisition University (DAU) have changed markedly in recent years. Gone are the classroom days filled with lectures and seminars led by expert practitioners. These days, well before they arrive on campus, students spend hours learning acquisition basics in online modules so that once they arrive on campus, precious classroom time can be spent in case studies and team exercises focused on applying the basic material. While new technology applications are most evident in our online instruction, innovative approaches are also being applied in the classroom. One of these new approaches is the large scale management simulation, Looking Glass, Inc.[®], that DAU licenses from the Center for Creative Leadership (CCL) in Greensboro, N.C. As indicated by its title, CCL is no stranger to creative training. Initially developed under a grant from the Office of Naval Research, Looking Glass has now become the most popular behavioral simulation in the world. It has also helped propel CCL into the top position in the world marketplace for leadership development, according to a recent *Business Week* executive education survey.

Bringing the Real World to the Classroom

DAU uses Looking Glass as a capstone exercise in its PMT-401 Program Manager's Course, a rigorous 10-week resident course built around case studies of current acquisition programs. Looking Glass helps participants move beyond the cognitive and analytical skills applied on the case studies to hands-on application in a simulated real-world environment.

Looking Glass is not a defense or program management simulation; however—remarkably—it mirrors the same challenges faced by defense program managers:

- Developing an acquisition strategy for the future
- Transitioning research and development products to the customer
- Handling production capacity limits and increased demand
- Resolving difficulties with international collaboration and competition

Gadeken is a professor at the DAU Fort Belvoir campus. His current interest centers on helping program managers become effective leaders. Gadeken received his doctorate in engineering management from the George Washington University.

- Dealing with raw material shortages
- Coping with environmental and legal issues
- Adjusting to corporate and public policies
- Deciding what to do with a nonproductive plant or a problem employee
- Working effectively in division and corporate cross-functional teams.



Looking Glass is a six-hour simulation of a glass manufacturing company with 4,000 employees and over \$200 million in sales. The company has three operating divisions, each facing a different internal and external operating environment. In each run of the simulation, DAU students are the top management team, in positions ranging from president to plant managers.

The day before the course begins, students are introduced to the simulation in a short session designed to familiarize them with the company, the top management positions, and each other. They learn the ground rules for the simulation and are given a glossy Looking Glass annual report. Then they select their positions and are each given an in-basket of memos and reports to review before the next day. Their in-baskets include division history, product information, and financial data, laced with over 150 problems and opportunities ranging from strategic investments to personnel issues.

Arriving at “work” the next day, participants find their own office area complete with desks, intercom phones, in- and out-baskets, and meeting tables. After a few administrative remarks, the company is open for business. Meetings are scheduled, telephones start ringing, memos

are written and delivered, and people interact. Almost invisible are the faculty facilitators who watch and record these interactions for later “play back” during the debriefings.

A unique feature of the Looking Glass simulation is the freedom allowed participants. There is very little structure during the exercise, so participants can move freely

LOOKING GLASS HELPS
PARTICIPANTS MOVE BEYOND
THE COGNITIVE AND
ANALYTICAL SKILLS
APPLIED ON THE CASE STUDIES
TO HANDS-ON APPLICATION
IN A SIMULATED
REAL-WORLD ENVIRONMENT.

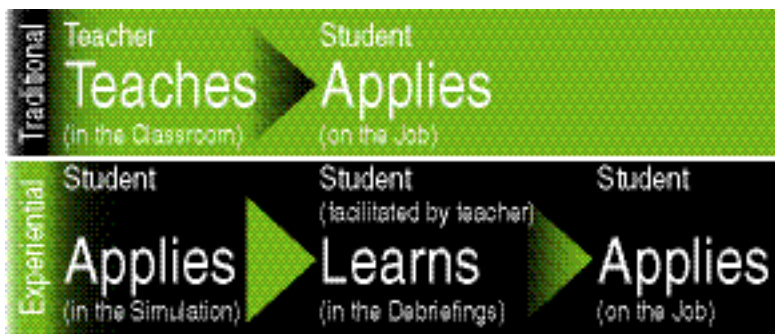
from their desks to meetings and informal discussions. By memo, phone, or in person, participants can contact anyone inside or outside the company. The high pace of activity mirrors the typical program office environment and makes it easy for participants to fall into their normal management style and behavior.

Analyzing the Experience

After the six continuous hours of activity, which include a working lunch, the simulation ends with an all-hands meeting chaired by the company president. This is followed by a detailed questionnaire in which participants document the information they knew, the issues they addressed, decisions that were made, and the perceived effectiveness of their peers and their division. This information is combined and compared with norms from the CCL database for later use in the debriefing process.

The debriefings are really the heart of the Looking Glass experience. Based primarily on participants’ reflections on their behavior and the outcomes resulting from it, three separate debriefing sessions are used to “unpack” the exercise and create meaningful learning opportunities. Like peeling an onion, each debriefing allows par-

Traditional vs. Experiential Learning



key principles differentiate experiential from traditional learning: experiential learning begins with an experience or application, and the student is in charge during the entire process. The difference is shown graphically (left) in “Traditional vs. Experiential Learning.”

How effective is this process? Both CCL and DAU have conducted follow-up research on the impact of the Looking Glass once participants return to the workplace. CCL studied 72 participants in four separate programs who identified a total of 287 lessons learned. CCL concluded that Looking Glass “provides developmental feedback and learning in important areas of managerial action and adds to that by providing the opportunity for new awareness in the often more inaccessible domains of self-management and the nature of managerial work.”

Participants to see more of their behavior, what worked and what didn't, and the impact it had on other participants. The first debriefing captures participants' immediate reaction to the simulation. The second addresses division (team) effectiveness. The third debriefing is a peer feedback process. Both facilitators and peers share their observations in a structured process designed to help participants identify their managerial strengths and weaknesses and set goals for improvement.

Effectiveness of Experiential Learning

The Looking Glass design is based on the experiential learning model. This model is the complete opposite of the traditional learning model. In traditional learning, the teacher teaches and the student applies. With traditional learning, students are left with the often difficult task of making the transition from the classroom to the workplace. In experiential learning, students are first given an experience where they must apply their current knowledge or practice. Then they are asked to examine results achieved and generate their own learning, which can be applied to improve their performance back at work. Two

clined that Looking Glass “provides developmental feedback and learning in important areas of managerial action and adds to that by providing the opportunity for new awareness in the often more inaccessible domains of self-management and the nature of managerial work.”

DAU evaluated 100 participants who took Looking Glass as an elective in the former Advanced Program Management Course and tracked them against a control group of students who had not taken Looking Glass. In the three-month follow-up back at work, Looking Glass participants significantly exceeded the control group in total goals submitted, management and leadership goals submitted, management and leadership goals achieved, and new management and leadership actions reported. Achieved goals dealt primarily with interpersonal skills, but also included problem solving, initiative, influence, and efficient use of resources. A surprising aspect of the study was the number of new actions taken that had not been set as goals immediately after the exercise. These actions were double the number of goals achieved from the formal goal-setting exercise. They fell into the same skill categories above, but two new areas also emerged: increased self-confidence and improved conceptual (strategic) focus.

After the success achieved using Looking Glass in the DAU Program Manager's Course, other potential uses of the simulation have emerged. Most noted of these is use with intact program office teams from the workplace. Here, the benefits go beyond personal development to include team building and understanding the impact of the organization's culture on performance. As an example of this application, DAU conducted three separate Looking Glass workshops for the Navy Standard Missile Program Office that included participants from their prime and support contractors. A half-day was added at the end of each workshop to address program-unique issues brought up during the simulation debriefs. This session was also used to generate action items to improve team and organization performance back at work.

Multi-dimensional Learning Opportunities

In summary, organizational simulations such as the Looking Glass provide learning opportunities on several di-

TWO KEY PRINCIPLES
DIFFERENTIATE EXPERIENTIAL
FROM TRADITIONAL LEARNING:
EXPERIENTIAL LEARNING BEGINS
WITH AN EXPERIENCE
OR APPLICATION, AND THE
STUDENT IS IN CHARGE
DURING THE ENTIRE PROCESS.

LOOKING GLASS REINFORCES THE SIMPLE LESSON THAT TO MANAGE OR LEAD OTHERS, FUTURE PROGRAM MANAGERS MUST FIRST LOOK WITHIN TO MANAGE AND LEAD THEMSELVES.

mensions. First, they allow direct application of basic program management skills such as planning, organizing, problem solving, and decision making with the opportunity to assess the results and impact. Second, participants are given the opportunity to demonstrate the full spectrum of interpersonal skills, including communication, listening, influence, and conflict resolution. Third, these simulations allow participants to benefit from a real team experience and deal with the different functional perspectives that must be accommodated to ensure team success. Finally, the larger scale of the Looking Glass exercise brings out true organizational dynamics as the different divisions (teams) must work together to achieve broader organizational objectives.

Professional acquisition managers face a constant stream of meetings, suspenses, problems, and unexpected events in their day-to-day work environment, but the hectic pace of the real world offers managers little opportunity to reflect on their experiences and learn from them. In Looking Glass, the carefully designed experience, reflection, and debriefing process does offer this opportunity. Through it, managers learn to see themselves and their skill set in a different and much clearer light.

As its name suggests, Looking Glass literally offers managers a mirror with which they can see a reflection of their behavior and its impact on others. Looking Glass reinforces the simple lesson that to manage or lead others, future program managers must first look within to manage and lead themselves.

Editor's note: The author welcomes questions and comments and can be reached at owen.gaden@dau.mil.

What The Students Say

We asked students in the most recent PMT-401 course what they thought of Looking Glass. Here is a sampling of responses:

- "Looking Glass provided useful insight into my managerial style. Feedback was specific and aimed at helping my job performance in the future. Much appreciated—keep using this simulation."
- "Looking Glass was excellent to simulate the time crunch we are all under."
- "Looking Glass was particularly valuable in providing an opportunity to stand in the shoes of an industry executive and deal with his challenges and pressures."
- "The simulation was very credible and realistic as far as problems and complexity of issues. This allowed me to put myself into the role."
- "Turned out to be much more enjoyable than I had expected and much more effective than classroom learning experience."

Participants in a recent Navy Standard Missile Looking Glass workshop were asked what they had learned from the experience. Here is what they said:

- "I learned that although I have strong points, the weak ones need work. I need to work on looking at the long term, not just what will happen tomorrow (tactical vs. strategic). I am good at sharing information; however, need to work on building a coalition."
- "It was very frustrating to take a back seat, but I fell into the trap that I complain about. When leadership is busy, take action, don't wait. I also confirmed that we have a great team."
- "I learned the importance of personal values."

What would the students tell prospective participants to expect from the Looking Glass experience?

- "The experience demands that you operate out of the box and encourages creative thinking."
- "Excellent opportunity for team building and to illustrate 'issues' with organizations and people that are too hard to do in a real world environment."
- "They should expect an interesting experience with an opportunity to take what they learn and apply it in improving future performance."